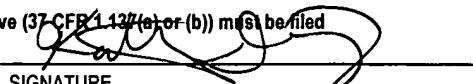


Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

TRANSMITTAL LETTER TO THE UNITED STATES DESIGNATED/ELECTED OFFICE (DO/EO/US) CONCERNING A SUBMISSION UNDER 35 U.S.C. 371		ATTORNEY'S DOCKET NUMBER 102364
INTERNATIONAL APPLICATION NO. PCT/US04/41315	INTERNATIONAL FILING DATE 11 December 2004	U.S. APPLICATION NO. (If known, see 37 CFR 45) To Be Assigned 107539107
TITLE OF INVENTION BIOSENSORS FOR DETECTING MACROMOLECULES AND OTHER ANALYTES		
APPLICANT(S) FOR DO/EO/US HEYDUK, Tomasz; HEYDUK, Ewa; and KNOLL, Eric		
Applicant herewith submits to the United States Designated/Elected Office (DO/EO/US) the following items and other information:		
<p>1. <input checked="" type="checkbox"/> This is a FIRST submission of items concerning a submission under 35 U.S.C. 371.</p> <p>2. <input type="checkbox"/> This is a SECOND or SUBSEQUENT submission of items concerning a submission under 35 U.S.C. 371.</p> <p>3. <input checked="" type="checkbox"/> This is an express request to begin national examination procedures (35 U.S.C. 371(f)). The submission must include items (5), (6), (9) and (21) indicated below.</p> <p>4. <input type="checkbox"/> The US has been elected (Article 31).</p> <p>5. <input checked="" type="checkbox"/> A copy of the International Application as filed (35 U.S.C. 371(c)(2)) <ul style="list-style-type: none"> a. <input type="checkbox"/> is attached hereto (required only if not communicated by the International Bureau). b. <input type="checkbox"/> has been communicated by the International Bureau. c. <input checked="" type="checkbox"/> is not required, as the application was filed in the United States Receiving Office (RO/US). </p> <p>6. <input type="checkbox"/> An English language translation of the International Application as filed (35 U.S.C. 371(c)(2)). <ul style="list-style-type: none"> a. <input type="checkbox"/> is attached hereto. b. <input type="checkbox"/> has been previously submitted under 35 U.S.C. 154(d)(4). </p> <p>7. <input checked="" type="checkbox"/> Amendments to the claims of the International Application under PCT Article 19 (35 U.S.C. 371(c)(3)) <ul style="list-style-type: none"> a. <input checked="" type="checkbox"/> are attached hereto (required only if not communicated by the International Bureau). b. <input type="checkbox"/> have been communicated by the International Bureau. c. <input type="checkbox"/> have not been made; however, the time limit for making such amendments has NOT expired. d. <input type="checkbox"/> have not been made and will not be made. </p> <p>8. <input type="checkbox"/> An English language translation of the amendments to the claims under PCT Article 19 (35 U.S.C. 371(c)(3)).</p> <p>9. <input checked="" type="checkbox"/> An oath or declaration of the inventor(s) (35 U.S.C. 371(c)(4)).</p> <p>10. <input type="checkbox"/> An English language translation of the annexes of the International Preliminary Examination Report under PCT Article 36 (35 U.S.C. 371(c)(5)).</p>		
Items 11 to 20 below concern document(s) or information included: <p>11. <input type="checkbox"/> An Information Disclosure Statement under 37 CFR 1.97 and 1.98.</p> <p>12. <input type="checkbox"/> An assignment document for recording. A separate cover sheet in compliance with 37 CFR 3.28 and 3.31 is included.</p> <p>13. <input checked="" type="checkbox"/> A preliminary amendment.</p> <p>14. <input checked="" type="checkbox"/> An Application Data Sheet under 37 CFR 1.76.</p> <p>15. <input type="checkbox"/> A substitute specification.</p> <p>16. <input type="checkbox"/> A power of attorney and/or change of address letter.</p> <p>17. <input checked="" type="checkbox"/> A computer-readable form of the sequence listing in accordance with PCT Rule 13ter.2 and 37 CFR 1.821- 1.825.</p> <p>18. <input type="checkbox"/> A second copy of the published International Application under 35 U.S.C. 154(d)(4).</p> <p>19. <input type="checkbox"/> A second copy of the English language translation of the international application under 35 U.S.C. 154(d)(4).</p> <p>20. <input checked="" type="checkbox"/> Other items or information: Petition and fee to Accept Color Photographs Under 37 CFR 1.84(b)(2)</p>		

This collection of information is required by 37 CFR 1.414 and 1.491-1.492. The information is required to obtain or retain a benefit by the public, which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.11 and 1.14. This collection is estimated to take 15 minutes to complete, including gathering information, preparing, and submitting the completed form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Mail Stop PCT, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

U.S. APPLICATION NO. (Unknown See 37 CFR 1.5) To Be Assigned		INTERNATIONAL APPLICATION NO. PCT/US04/41315	ATTORNEY'S DOCKET NUMBER 102364	
The following fees are submitted:			CALCULATIONS	PTO USE ONLY
21. <input checked="" type="checkbox"/> Basic national \$300			\$ 300.	
22. <input checked="" type="checkbox"/> Examination Fee If international preliminary examination report prepared by USPTO and all claims satisfy provisions of PCT Article 33(1)-(4) \$100 All other situations \$200			\$ 200	
23. <input checked="" type="checkbox"/> Search fee Search fee (37 CFR 1.445(a)(2) has been paid on the international application to the USPTO as an International Searching Authority \$100 International Search Report prepared and provided in the Office \$400 All other situations \$500			\$ 100	
TOTAL OF 21, 22 and 23 =			\$ 600	
<input checked="" type="checkbox"/> Additional fee for specification and drawings filed in paper over 100 sheets (excluding sequence listing or computer program listing filed in an electronic medium). The fee is \$250 for each additional 50 sheets of paper or fraction thereof				
Total Sheets	Extra sheets	Number of each additional 50 or fraction thereof (round up to a whole number)	RATE	
188 - 100 =	88/50 =	2	x \$250	\$ 500
Surcharge of \$130.00 for furnishing the oath or declaration later than 30 months from the earliest claimed priority date (37 CFR 1.492(e)).			\$	
CLAIMS	NUMBER FILED	NUMBER EXTRA	RATE	\$
Total claims	20 - 20 =	0	x \$50	\$ 0
Independent claims	3 - 3 =	0	x \$200	\$ 0
MULTIPLE DEPENDENT CLAIM(S) (if applicable)			+ \$360	\$
			TOTAL OF ABOVE CLAIMS =	\$ 1100
<input checked="" type="checkbox"/> Applicant claims small entity status. See 37 CFR 1.27. The fees indicated above are reduced by ½.			\$ 550	
			SUBTOTAL =	\$ 550 + \$130
Processing fee of \$130.00 for furnishing the English translation later than 30 months from the earliest claimed priority date (37 CFR 1.492(f)).			+	\$
			TOTAL NATIONAL FEE =	\$ 550 + \$130
Fee for recording the enclosed assignment (37 CFR 1.21(h)). The assignment must be accompanied by an appropriate cover sheet (37 CFR 3.28, 3.31). \$40.00 per property			+	\$
			TOTAL FEES ENCLOSED =	\$ 550 + 130
			Amount to be refunded:	\$
			Amount to be charged:	\$
a. <input checked="" type="checkbox"/> A check in the amount of \$ 680.00 to cover the above fees is enclosed.				
b. <input type="checkbox"/> Please charge my Deposit Account No. _____ in the amount of \$ _____ to cover the above fees.				
c. <input checked="" type="checkbox"/> A duplicate copy of this sheet is enclosed.				
d. <input checked="" type="checkbox"/> The Commissioner is hereby authorized to charge any additional fees which may be required, or credit any overpayment to Deposit Account No. 50-1662. A duplicate copy of this sheet is enclosed.				
e. <input type="checkbox"/> Fees are to be charged to a credit card. WARNING: Information on this form may become public. Credit card information should not be included on this form. Provide credit card information and authorization on PTO-2038.				
NOTE: Where an appropriate time limit under 37 CFR 1.495 has not been met, a petition to revive (37 CFR 1.137(a) or (b)) must be filed and granted to restore the International Application to pending status.				
SEND ALL CORRESPONDENCE TO: Kathryn J. Doty Polsinelli Shalton Welte Suelthaus PC 100 S. Fourth Street, 11th Floor St. Louis, MO 63102				
SIGNATURE 				
Kathryn J. Doty NAME 40-593 REGISTRATION NUMBER				

10/539107 **PATENT**

Atty Docket No. 102364

Express Mail Label No. EV 535074245 US

JC17 Rec'd PCT/PTO 15 JUN 2005

UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant(s):	Tomasz Heyduk et al.	Group No.	To Be Assigned
Serial No.:	To Be Assigned	Examiner:	To Be Assigned
Filed:	June 15, 2005	Conf. No.	To Be Assigned
For:	BIOSENSORS FOR DETECTING MACROMOLECULES AND OTHER ANALYTES		

Mail Stop PCT
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

TRANSMITTAL

Dear Sir:

Attached hereto and transmitted herewith are the following:

- Transmittal Letter to the United States Designated/Elected Office (DO/EO/US) Concerning a Submission Under 35 USC 371 (2 pages in duplicate)
- Application Data Sheet (3 pages)
- Utility Patent Application (pages 107)
 - (1) Copy of Figs. 1-33 in Black & White (33 sheets total)
 - (3) Copies each of Figs. 1-33 in color
- Petition Under 37 CFR 1.84(b)(2) for Acceptance of Color Photographs (12 pages)
- Preliminary Amendment
- (2) Copies in computer readable form of Sequence Listing only, labeled "Sequence Listing-CRF"
- 37 CFR 1.821(f) Statement

CERTIFICATE OF MAILING

I hereby certify that, on the date shown below, this correspondence is being

- deposited with the United States Postal Service in an envelope addressed to Mail Stop: PCT, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

MAILING

37 C.F.R. §1.8

- as first class mail.

37 C.F.R. §1.10

- as "Express Mail Post Office to Addressee"
EXPRESS MAIL NO. EV 535074245 US

FACSIMILE TRANSMISSION

- transmitted by facsimile to the Patent and Trademark Office.

M. Sue Clements

Name of Depositor

M. Sue Clements

Signature

6-15-05

Date

10/539107 PATENT

Atty Docket No. 102364
Express Mail Label No. EV 535074245 US

JC17 Rec'd PCT/PTO 15 JUN 2005

- (1) Paper copy of Sequence Listing (27 pages)
- Declaration (37 CFR 1.63) for Utility or Design Application Using an Application Data Sheet (3 pages; unexecuted)
- Check No. 010753 in the amount of \$680.00 (for filing, search, exam and petition fees)
- Certificate of Mailing by Express Mail
- Stamped, Pre-Addressed Postcard

The Commissioner is authorized to charge any additional fees which might be due or credit any overpayment to Deposit Account No. 50-1662. A duplicate copy of this transmittal is attached.

Respectfully submitted,

POLSONELLI SHALTON WELTE SUELTHAUS PC



Kathryn J. Doty, Reg. No. 40~~93~~
100 South Fourth Street, Suite 1100
St. Louis, Missouri 63102
Tel: (314) 552-6850
Fax: (314) 231-1776
Attorney for Applicants

Date: June 15, 2005

048483 / 102364
KJDOT 290009

10/539107

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CERTIFICATE OF MAILING BY "EXPRESS MAIL" (37 CFR 1.10)			Matter No.	
Applicant(s): Tomasz Heduk et al.			102364	
Serial No.	Filing Date	Examiner	Group Art Unit	Confirmation No.
To Be Assigned	June 15, 2005	To Be Assigned	To Be Assigned	To Be Assigned
Invention: BIOSENSORS FOR DETECTING MACROMOLECULES AND OTHER ANALYTES				
<p>I hereby certify that a Transmittal (2 pages, in duplicate); Transmittal Letter to the United States Designated/Elected (DO/EO/US) Concerning a Submission Under 35 USC 371 (2 pages); Application Data Sheet (3 pages), Nonprovisional Patent Application (107 pages); Preliminary Amendment (8 pages); Three (3) Copies of Figs. 1-33 (33 sheets) in Color; One (1) copy of Figs.1-33 in Black & white (33 sheets); Petition Under 37 CFR 1.84(b)(2) for Acceptance of Color Photograph (12 pages); 2 Copies in computer readable form of Sequence Listing only, labeled "Sequence Listing-CRF"; 37 C.F.R. 1.821(f) Statement with paper copy of Sequence Listing (27 pages); Declaration (37 CFR 1.63) for Utility or Design Application Using an Application Data Sheet (1 page); Check No. 010753 in the amount of \$630.00 (for filing, petition, search and exam fees); a Certificate of Mailing by Express Mail (1 page); and a stamped, pre-addressed postcard are being mailed by U.S. Postal Service Express Mail to Addressee, to: Mail Stop PCT, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450, this 15th day of June, 2005.</p>				
<p style="text-align: center;"><u>M. Sue Clements</u> (Typed or Printed Name of Person Mailing Correspondence)</p>				
<p style="text-align: center;">(Signature of Person Mailing Correspondence)</p>				
<p style="text-align: center;"><u>EV 535074245 US</u> (“Express Mail” Mailing Label Number)</p>				

048483 / 102364
KJDOT 289452